10.  Science Eye 

Every human on our globe is made of an octillion vibrating quarks which are dive-bombed at two hundred million meters a second by nine quintillion neutrinos every day while constantly enveloped with multiple types of electromagnetic radiation.(1-3) Far less glamorous is that each body comes from the same elements found in soil, and will all revert to dirt.

By widest definition science is possession of knowledge as distinguished from ignorance or misunderstanding.(4) By that definition my entire book is dedicated to science. However, science in this chapter reflects common definitions: knowledge concerned with the physical world and its phenomena, branches of systematized knowledge made into specific objects of study, and generally accepted knowledge that has been accumulated and formulated with reference to discovery of established truths or laws.

Many people, including otherwise intelligent people in our twenty-first century subscribe to one or more antiscientific ideas, ideas without any evidence whatsoever, or ideas with more evidence against them than for them. Now I'm unconcerned with irregular ideas such as Earth being flat, and others of no consequence to how anyone lives their life. Other subjects such as quantum physics are highly important for specialists, but unimportant for laymen. Unnecessary argumentation wastes time and breeds needless conflict. But science and fact-denying that negatively impacts others must be addressed.

Astrology?

Some people note that astronomy came from astrology, or that astrology was astronomy's forerunner. But note that alchemy was t forerunner of chemistry. Yet unlike modern chemistry, t purposes of alchemy were to turn base metals such as lead into noble metals such as gold, create universal elixirs to cure every disease or give immortality, potentially do other dubious things, and was connected with magic. Alchemy has been completely discredited, while chemistry is proven. Most of astronomy has been proven too, based on scientific facts. And astronomy and astrology have two very different goals. Most astrologers know very little about astronomy, and most astronomers know very little about astrology. Also, astrology, like alchemy, was connected with magic and has fantastical claims of its own, such as revealing secret truths about others and foretelling the future. Yet an estimated 30% of people still believe in the legitimacy of astrology in one degree of another. Hmmm. Now the first *confirmed* system of astrology came from the Babylonians circa 2,000 BC. Their astrology was based on the idea that the sun, moon, and five known planets influenced events and people on Earth.(5) Adherents to all systems of astrology rejected the idea that astronomical bodies influenced things due to natural forces according to the laws of physics. And it appears that it wasn't until 700 BC: 1,300 years later, that the Babylonians switched to basing their astrology on 12 different constellations of stars. The ancient Greeks learned astrology from the Babylonians, solidified the constellation zodiac idea, and passed it down to modern western culture.

Then there's Indian astrology. While Greek or western astrology is tropical, that is, the zodiac is defined from its position relative to the vernal equinox, Indian astrology is sidereal, that is, defining the signs relative to the apparent movement of fixed stars.(6) Then we have Chinese astrology. Unlike western astrology, which is chiefly determined by the cycle of constellations, t Chinese zodiac is chiefly determined by a 12 year

cycle of Earth around the sun. Its own symbolic animals for signs, such as year of the Monkey, year of the Horse, and year of the Dragon, are completely different from western symbols such as Sagittarius, Virgo, and Capricorn.(7) Then we have ancient Mayan astrology, based on particular days within 20 different signs such as Knife, Crocodile, and Death.(8) Then there are those who mix the systems of deviate from them to come up with other variations of astrology. So if anyone would want to learn anything from astrological predictions, they would first have the problem of determining which system is right. And each system contradicts the other.

So again, it's very unlike science since there is a general consensus concerning established scientific facts. Despite that, many astrologers claim that astrology is scientific, proposing causal agents such as electromagnetism and gravity. However, the electromagnetic fields measured from Earth, of distant planets such as Saturn, are far smaller than those produced by ordinary household appliances. And the gravitational pull of stars besides our sun, which are quadrillions of miles away, by the time they reach Earth are so miniscule, they're almost nonexistent.(9,10) Besides, even if one's astrological sign was valid, due to the slow, continuous change in the orientation of Earth's rotational axis, most people were actually born under a different sign than the ones assigned to them by today's outdated horoscopes. Each year the error in dating signs has grown greater.11

The big question is: does astrology work? T answer is: Astrology in any of its forms has NEVER demonstrated its effectiveness in controlled studies. And it has never been shown to help people live their lives. Those it supposedly helped have instead been cases of coincidence. Followers of astrology suffer from confirmation bias: a form of cognitive bias where adherents tend to selectively remember predictions that came true, while forgetting predictions that turned out to be false. In other words, wishful thinking. Though astrology has had thousands of years in which to prove its veracity, it has failed.12

So don't waste your time with astrology, don't evaluate yourself, anyone else, or anything else based on these false ideas, and never let anyone use or manipulate you through this or similar means. Finally, from Shakespeare's Julius Caesar Act 1 Scene 2: "The fault, dear Brutus, is not in our stars, but in ourselves, that we are underlings."13

Astronomy

"Of all sciences cultivated by mankind, astronomy is acknowledged as, and undoubtedly is, the most sublime, interesting, and useful. For by knowledge derived from this science, not only the bulk of Earth is discovered ……..; but our very faculties are enlarged with the grandeur of the ideas it conveys, our minds exalted above contracted prejudices"----------Astronomer James Ferguson, 1757.(14)

Biology/Ecology/Zoology

Most people talk and behave as if non-human animals are far different than Homo sapiens in many ways. Yet from a scientific standpoint, especially biology, only one factor makes humans superior. That is, intelligence, which allows us to become educated.

In some cultures it is an insult to be identified with certain animals, such as rats, pigs, or dogs. Yet trained rats are the best method available to clear minefields, saving tens of thousands of humans from being killed or maimed.15

Be self-aware that you too are an animal and dependent on the web of nature. Always do your best to think and act accordingly.

Climate Change: Serious Threat or Liberal Nonsense?

I'm very conservative. And unlike most people, I care about truth more than I care about appearing right all the time. So I have examined the claim that climate change (sometimes referred to as global warming) is a serious threat, though this viewpoint is dominated by liberals. For example, Charles Mann's video: *How to Win Any Debate on Climate Change.*(16) It got attacked for being propaganda, and got more thumbs down than thumbs up, despite some positive feedback. Here are some paraphrased excerpts:

Here's how the physics of climate change works. Our Sun bathes Earth with every imaginable kind of light and radiation: ultraviolet, microwaves, you name it. About a third of that bounces off either clouds, dust in the air, or Earth's surface. A little bit is absorbed. Notably, the ozone layer absorbs the ultra-violet. The remaining two-thirds land on the ground, water, or vegetation. Now all these different kinds of light come here, heating up the ground, vegetation, and water. They emit infrared light: this one kind of light. And so, different kinds of light come in; infrared goes out.

Here's a fact discovered in the 1870s: Nitrogen and oxygen make up about 99% of the atmosphere. They cannot absorb infrared light. So if the atmosphere was entirely made of nitrogen and oxygen, all this infrared light would pass right through it, and we'd be in a snowball, frozen. But water vapor can take it in. That's good, because the water vapor absorbs most of the infrared light, then passes it to the nitrogen and oxygen, and we have our present warm Earth. That's how the atmosphere works.

Now water vapor doesn't absorb **all** the infrared. It lets just a few frequencies or wavelengths through. That's good, because just enough energy escapes to prevent Earth from getting unbearably hot. Water molecules say to this particular frequency "No, I won't absorb you." So the system works great. T water vapor absorbs a proper balance of it, keeping a Goldilocks temperature. But the bad guy carbon dioxide comes in. Unfortunately it absorbs just those frequencies that water vapor would otherwise let through. So now, with lots of carbon dioxide, almost all the infrared is being absorbed in the atmosphere. And it gets hotter. It infuriates scientists when people say it's a hoax because this is really basic chemistry and physics. This diagram redrawn from a 1920s spectroscopy textbook shows the same thing. This is not new.

Imagine the atmosphere as a bathtub. T water pouring in is the infrared light. You're sitting there all cozy, with little holes in the bathtub to let the water out, and balanced between the incoming and outgoing water. Now take some bubblegum; plug up just one or two little holes, that's all you need. And very slowly, the water will begin to rise, and things will go to hell. That's climate change. They always say "There's a 97% consensus." Actually, there's a 100% consensus on basic chemistry and physics. The only question is exactly how fast that water will rise.

Now for viewer objections intertwined with my responses: Brian said "There are thousands of variables." But none of the variables or complications would change the final outcome. Sigmund Q Freud said "Everyone run from the .004% ppm Carbonzilla! Look at all the climate alarmists buying islands and beach-front property telling us sea levels will rise; lol." I say: It needn't act quickly like Godzilla to destroy civilization. It can work slowly over a hundred plus years and have the same end result. And where's the documentation that climate change scholars are buying up islands and beachfront property? Hearsay.

Mike C, Jdan76, and Apumaster said "How is it that life flourished with several thousand ppm of CO2 for a long time, yet we're worried about exceeding 400 ppm? CO2 has been 3,000% higher in the past

and Earth was fine. And Earth was warmer 5,000 years ago." I say: There's ZERO documentation that what they said was true. And it wouldn't matter, since there were no instruments to measure anything back then. So Earth could even have had far less carbon dioxide than now and have been colder. We cannot know for certain.

Jack Walton and Abumaster said "Carbon dioxide has a higher molecular weight than our atmosphere or water vapor. Therefore it's heavier and gravitates to the ground to feed the plants." And "We now know that a rise in CO2 is great for plant life. Any heating in the past lead to prosperity for all life on Earth!" I say: There is far more than enough carbon dioxide to feed all plant life. And carbon dioxide can not create new plants, just fuel existing plants. And there was far more plant life in the past, when Earth was covered in forests. Now with massive deforestation and over 7 billion people breathing out carbon dioxide and creating it as a byproduct of technology, there's far less demand for this CO2 and therefore we have harmful excesses of CO2.

Ash Smitty said "We think we have the answers to everything. But scientists cannot predict the weather for next week." I say: As far as being a know it all, speak for yourself. And scientists do predict next week's weather all the time. Just not perfectly. Seaplaneguy said "Gases cool, they don't heat things up, idiots." I say: Common sense should tell you that not all gases cool. Consider our Sun, a giant ball of gas.

Jay Willburrow, Michael Whathey, and Mojo Dude said "His bathtub analogy wtf. If the holes are plugged, the water will simply go out the other holes faster. As the water rises, pressure rises and makes more water flow through the still open holes." And "The bathtub theory assumes that Earth can't work 3% harder to get rid of what humans are causing." I say: ALL analogies are flawed by nature. You can never make an analogy fit exactly, as they are simply meant to be helpful illustrations, not blueprints. And the major difference between the bathtub analogy and global warming is that excess water can go elsewhere but excess CO2 cannot.

Gus Bernardo said "What's being questioned is the very assumption that climate should be stable in the first place. The planet has never been stable. Climate has never been stable. Climate changes all the time. It's a natural process. Get over it." I say: That's very misleading. What is being warned about is NOT Earth's historical fluctuations and instability. Rather, they're warning about fluctuations and instability that EXCEED historical, natural, and acceptable parameters. Robbie Retro said "As Earth heats up, more water vapor is put into the atmosphere, reflecting more energy away from the ground. It's self-regulating! I say: Extra water vapor doesn't stay up there. The more water vapor in the atmosphere, the more it rains and comes back down.

Europa Europa said "There are about 2,500 N2 and O2 molecules for every CO2 molecule. Strike 1." I say: The lecturer just explained that far more N2 and O2 molecules are needed just to maintain the balance in temperature. If there are 2,500 pumpkin pie molecules for every 1 cyanide molecule in something to eat, that doesn't make it okay. He then said "N2 and O2 have higher specific heats than CO2. So it takes more energy to raise 1 molecule of N2 or O2 by 1 degree per unit mass than for CO2. Strike 2." I say: That's the whole point. Since it takes less energy to heat via CO2, excess CO2 will cause warming.

Europa Europa then said "If 1 molecule of CO2 can heat up the atmosphere made up of 2,500 molecules of N2 and O2 on average, then I want to know how this breakthrough technology works so I can heat 2,500 homes from just one home's power. That's strike 3." I say: The giant difference is that atmospheric CO2 contributes to warming because our Sun directly strikes it, while there's no Sun inside your house so that CO2 could use it to create heat. Maybe in the future advanced solar power and panels could be invented to

heat 2,500 homes with the energy of only one. But we can't right now. So no strikes for Charles Mann. Three strikes for Europa, and he's out.

Random Kid said "Earth existed for over 4 billion years. It survived a lot more than the industry that humans have had in place for only 100 years!" I say: But NOT any more pertaining to global warming. Even volcanoes emit less than 1% of the CO2 that humans emit via industry. Robert Shaver and John Thane said "A real argument is: is excess CO2 caused by humans?" And "He hasn't shown that man is responsible for a significant and sufficient amount of CO2." I say: The isotope carbon 13 is far less common in fossil fuels than what's naturally in our atmosphere. And over time we've seen concentrations of carbon 13 in atmospheric CO2 decreasing. This indicates that more and more atmospheric CO2 is coming from petroleum and others things humans are using.

Plukke-B said "Who says Earth doesn't open up other holes if humans close them?" I say: The only way Earth could open up other holes would be to have massive earthquakes to open up the ground. But that itself would destroy us. And it's impossible for CO2 or anything else to be expelled from Earth's domain unless it's propelled at a speed faster than 40,270 kilometers or 25,020 miles per hour. That's known as escape velocity, the speed needed to overcome Earth's gravity.

Bizzylzzy87 said "They always leave the most important point out: What's the solution? And will the whole world bend to your will, especially countries like India and China?" I say: An immediate short term solution would be to cut down on CO2 emissions as much as is feasible. Longer term solutions would be to plant trees and other vegetation to make superfluous CO2 into something useful. And to control human population growth. The eventual solution would be to build spacecraft to collect superfluous atmospheric CO2, and expel it past Earth's atmosphere and into outer space. And I'm sure that countries like China and India will come around to tackle climate change if things get bad enough to immediately threaten their existence. But even if everyone else chooses not to do the right thing, that wouldn't justify your failing to do what you know is right.

Finally, what's happening is that many people have cultural, economic, political, religious, or other prejudices that they invoke when they want to cherry-pick one scientific result or another. Some deny climate change because the company they work for produces excess CO2 and would thus be (correctly) labeled as part of the problem. Some simply hate change. Many people don't care about what might happen to others in the future if they themselves would no longer be alive to be effected by it. Most people do not love truth. Some would not embrace truth even if it would save their life. And failure to embrace truth in one area is dangerous in that it can lead to rejecting all important truths.

Panpsychism

Traditional cultures believed that astronomical bodies like our sun were alive, intelligent, and conscious, having emotions and free will. This was the default position throughout history, even among scientists. In the Middle Ages people generally assumed that the universe was alive; the whole universe a living being. This is panpsychism, formerly called animism.

However, in the 17th century the mechanistic revolution arose, breaking with the previous world view. Afterward, all nature was seen as strictly mechanical, the universe a machine made of nonconscious matter. Nobody actually debated our sun's consciousness. It was suddenly assumed to be nonconscious by prevailing materialist philosophers. Consciousness became isolated into the only physical containers we know that

contain it: brains. So we were left with this idea that consciousness only exists in these tiny little areas of the universe. Before the 17th century this cerebro-centric view of consciousness was apparently nonexistent. Why reembrace panpsychism now? Due to a crisis within science: the existence of human consciousness. And nobody understands how brains generate consciousness. Moreover, panpsychism has now entered the realm of serious debate within the scientific community. Panpsychists postulate a mind in all self-organizing systems, which exist at every level of complexity. It does not apply to systems that are not self-organizing, such as chairs, tables, computers, motorized vehicles, et cetera. Some things do not organize themselves. They are organized by US.

Though consciousness need not be associated with brains, a needed criteria for consciousness is ability to make decisions among various possibilities. Our sun could certainly make decisions that have effects. Consider his solar flares and coronal mass ejections. The directions which he projects them greatly affect what happens in our solar system. Our sun influences what happens on Earth, modulating her in eleven year cycles and in more subtle ways. And eleven year cycles were periodically absent. So our sun is unlike clockwork mechanisms that just go on predictably; he is extremely variable. Nobody knows what he will do next, which is why NASA has space weather forecasts. Besides, our sun is essentially electrical; plenty of that electrical activity is highly indeterminate.

Our sun's mind could influence his physical activity via electrical activity. Consider that our minds interact with our brains via the interface of electromagnetic fields between them. Alpha waves, Gamma waves, Theta waves, et cetera are associated with different types of consciousness. Overwhelming evidence supports the electrophysiological basis of mental activity. The interface between minds and brains is via electrical patterns, which explains our consciousness. You can also affect people's consciousness by electromagnetic stimulation of the brain. Though memories being stored in brains is a dogma of science, there's very little evidence for it, and it's surprisingly difficult to demonstrate. Scientists have tried for a hundred years to do so, failing time and again. Perhaps they failed because memories are not stored inside brains. Brains may be more like TV receivers than video recorders, tuning into influences from their own past states, which travel via morphic resonance: the influence of like upon like within self-organizing systems across space. Morphic reasonance is the idea that there is a kind of memory in all nature.

Also, all self-organizing systems may have a collective memory. For example, each animal species may draw upon a collective memory of its kind. So perhaps our entire galaxy has a galactic mind, stars being like cells in a body, each galaxy like a cell in a universal body (or Anima Mundi as coined by Plato). Learning to communicate with our sun directly would be far cheaper than satellites and solar probes. Replacing reductionist science with holistic science could take us much further than any other rival cosmology.17

Psychic Powers?

Magician "The Incredible Randi" had for years offered a one million dollar prize to anyone who could demonstrate under controlled conditions, that they indeed possess any type of psychic power. Either those making such claims refused to take the challenge, said they would but backed out, or took the challenge and failed.(18) All psychic powers have been debunked. A common claim that is closely akin to extrasensory power is the claim of having intuition. See Testing "Intuition" in my chapter XXV.

Psychology ("Social Science")

People assume that the fields of psychiatry and psychology are based on science without researching the facts. Therefore I have authored a full length dissertation on these issues (Chapter XIX of this book). I adjure you to read it.

Quantum Entanglement

Particle entanglement, a seemingly otherworldly discovery pertaining to quantum mechanics (the second of the two major branches of science), is the most inexplicable phenomena in all science.(19,20). It is considered the strangest, most counterintuitive concept in physics. Albert Einstein not only denied the existence of entanglement, but the existence of the entirety of quantum physics, stating "The world simply cannot operate that way." Yet quantum mechanics has been completely verified. In fact, quantum theory was used to create one of the first lasers, and create transistors, which led to the computer revolution, all made possible by the equations of quantum theory.

Per entanglement, it is a very powerful connection that exists between pairs of particles. Even if they're very far apart, they're somehow always coordinated. Nature's fundamental building blocks can be connected and influence each other simultaneously, as if the space between them doesn't exist. Two objects can mirror each other without any apparent connection. You could have situations where causes and effects happen simultaneously. It would be like having two particles, each hidden under a cup. Looking at one mysteriously causes the other to reveal itself too, with matching properties. The equations imply that a source of photons could create pairs in such a way that when we measure one, causing it to snap out of its fuzzy state, the other mysteriously snaps out of its fuzzy state at the same instant with correlated properties.

Another way to think of the paired particles is to imagine a game that's somehow rigged. Suppose you have a pair of quantum dice. You throw them and observe: they show 6-6. Shake again, throw, and observe. Now they're both •••. Shake again, throw, and observe. Now they're both •. These particles can be separated at any arbitrary distance such as Princeton and the Andromeda galaxy. A choice to measure something here is somehow instantaneously effecting what can be said about this other particle.

While Einstein finally conceded to quantum mechanics theory (albeit considering it incomplete) since it was inescapably verified, he still denied the existence of particle entanglement, labeling it with the disparaging term "spooky action at a distance." Therefore, two giant telescopes were simultaneously focused on two remotely distant galaxies to make measurements on subatomic particles, which verified entanglement. In another experiment to prove particle entanglement, they focused a laser onto calcium atoms, causing them to emit pairs of photons that quantum theory equations said should be entangled. After hundreds of thousands of measurements, it was verified that the particles were indeed spookily entangled. The verification of particle entanglement destroyed Einstein's notions of space and time. In fact, progressive labs around the world are now racing to harness quantum entanglement to create revolutionary new technologies like quantum computers. They would be able to do many marvelous things regular computers cannot.

The first people to react to this extraordinary result were a group of free thinking physicists calling themselves the "Fundamental Fysics Group". They wrote books describing quantum entanglement as the deep connectedness of everything in the universe; the great cosmic oneness. This implies that all things are empty insofar as they lack any inherent essence or existence. This emptiness applies not just to people and things, but also to the analytic categories that describes them. This emptiness results from the dependent origination of all

things. In other words, all phenomena lack their own inherent existence because their very existence depends on the conditions that give rise to them.

Quantum physics possesses two truths: conventional truth (determinate reality brought about via observation) and ultimate truth (an indeterminate reality expressed as probabilities). Particle entanglement in specific proves that there is a whole new hidden reality beyond our comprehension. So we should realize that the more we learn of science, the more we should realize how ignorant we are. Instead of being able to harness our universe and be masterful, we ourselves are perpetually mastered. This should be quite humbling.

Radiometric Dating

Radiometric (or radioisotope) dating is a method used to date materials such as rocks by attempting to use observed rates of decay of one element into another, such as uranium into lead and potassium into argon to get supposedly accurate results. Yet no only do various radiometric dating methods contradict one another, the methods contrast sharply with an hourglass clock analogy. In an hourglass we how much time passed by seeing how much sand has fallen to the bottom. Radiometric daters likewise try to check how much "sand" fell from the "top" (parent isotope) into the "bottom" (daughter isotope).

Yet unlike an hourglass which can be tested against trustworthy clocks, this dating has three unprovable assumptions: A) We cannot know whether or not the artifact's original state was filled with daughter isotopes, had some of them, or had none; B) We cannot know whether or not said artifact had lots of contamination and interference, a little, or none, during its long history, which would have dramatically effected its present state; C) We cannot know whether or not the decay rate was constant, had sped up dramatically, or had slowed down dramatically. What should make radiometric dating even more unreliable is that fact that everything on Earth must be the same age as Earth! Think about it. In summary, radiometric dating is near worthless.

Radium

Greetings. Now radium was discovered in 1898 by Marie and Pierre Curie, which discovery was released to the public in 1902. But all they really knew about radium was that it was extremely radioactive, glowed in the dark, and constantly gave off this slight warmth. After Marie and Pierre discovered that radium could destroy human tissue, it was immediately put to work destroying cancerous tumors, of which it did a great job. Because of this supposed life saving nature, radium was viewed as this wondrous medical marvel, and championed as history's great find. Without bothering to find out if radium had any detrimental effects, it was assumed that radium was incredibly healthy. The reasoning was, if it could destroy cancer cells, it could surely solve anything. It was the new wonder element.

Doctors and anyone else who sold anything medical used it as a cure all. Any kind of affliction you can think of had some kind of radium product to fix that ailment. There were radium wound dressings, radium water, radium clinics, and radium spas. It was everywhere, particularly in the United States. It seemed like a beacon of light, literally, to anyone who was suffering. But what they didn't realize was that radium was actually slowly killing people from the inside out.

In April 1917 the USA joined World War I. All the men were sent to war, and the girls were left at home to help with the war effort however they could. Working class females across America flocked to all the factories, trying to get any job available. But there was one particular job that everyone wanted: dial paint-

ing, since it paid three times average factory wage. Dial painting wasn't a salary job. You were paid per watch face that you painted.

So the quicker you were the better you got paid. You were working with one of the most valuable materials on Earth at this point. Radium centered businesses began popping up all across America, mostly on the east coast, which was closer to the war effort. I will focus particularly on one of these factories: The Radium Luminous Materials Corporation in Newark, New Jersey. The girls that worked there painstakingly painted luminous numbers on tiny watch dials. They need to be painted with radium because the radium would make it glow in the dark for military use so that soldiers could see them at night, but not as bright as a lightbulb, which would allow them to be seen by enemy soldiers.

Each girl was required to mix her own paint. They would dab a radium powder: radium mixed with zinc sulfide, which would give this amazing glow. The paint was called Undark paint, which glowed with greenish white luminosity. Due to the tiny size of the dial numbers, the girls needed really slim paintbrushes. As the girls worked, the paintbrush hairs would inevitably spread, and they could not function properly. And so they used a technique called lip pointing, where they would wet the bristles in their mouth to put the hairs back together. Each time they did they would swallow a miniscule amount of radium powder.

The girls were told it was completely safe to do so. They would sometimes question their supervisors about it, and each time were told it was perfectly healthy; probably even good for you. But the bosses and people higher up in the factory knew otherwise. They knew that radium could have detrimental effects and was known to be hazardous. Other employees were only allowed to handle radium with tongs, protective lead aprons, goggles, and suchlike. The company knew that radium was bad for people, as the company founder needed part of his finger amputated to get the radium out, but they still let the girls lip point.

Some even told the girls that the radium would make them more beautiful and make their cheeks glow. Some of these girls did literally have this glow to them, as they were regularly covered in radium powder. But what they didn't know is that this radium was concurrently eating their bones from the inside or growing the beginning stages of tumors that would become the size of basketballs. Some girls even wore their evening dresses to work if they knew they were going out to dance that night because they would leave glowing. It was 1922 when the first girls started showing signs of illness. Another colleague named Molly had to quit her job because she became so ill. She had no idea what was causing it.

It all started when she had an aching tooth. And so Molly went to the dentist, expecting them just to remove the tooth and that's it. They pull the tooth out, but the ache won't stop. The wound in her gum refuses to heal. It's an open abscess in her mouth. Then the next tooth starts hurting. And then the next. Molly's dentist pulls out every single tooth that's causing an issue. Yet it just gets worse. Her mouth was constantly seeping with puss from abscesses and ulcers, causing her to have constant horrific breath which couldn't be stopped. And her legs, arms, and everything else hurt besides. By May 1922 Molly had lost most of her teeth. One day she went to the dentist again. While the dentist went into her mouth to pull another tooth, her entire jaw crumbled in his hand. He literally removed part of her jaw by lifting it out of her mouth without effort. Still, nobody knew what was wrong with her.

By this point other factory workers had also acquired these symptoms. Some of them were having aching jaws, some were having aching limbs. Others couldn't get out of bed in the morning since it hurt so much. But this was years after they first started working at the factory. On September 12th, 1922 the infection spread to Molly's throat, where it ate through her jugular vein, and Molly literally choked to death on her own blood. She was just twenty-four. Molly was the first of many girls to die from radium's effects.

Across New Jersey more and more girls were going to their doctors with similar symptoms. But each case was different enough to not link it to the last. Since people were making massive amounts of money off of radium, nobody wanted to question it.

In December 1922 cases began to be reported, but reported as phosphorus poisoning. Finally, in 1924 it was proven that radium caused these horrific illnesses. Yet after authorities found that radium was the cause, management lied and said they constantly warned the girls about safety hazards. And once radium is in the body it cannot be removed. It has a half-life of 1,600 years (a half-life is the time it takes for the concentration of any substance to decrease by half). Nothing known to science can neutralize radium. So tragedies continued. In 1925 Dr. Levin from that company got blackened legions on his hands, then suddenly died at age 36 from pernicious anemia. An autopsy proved that he was inundated with radium. Other young women were bedridden in hospitals with hollowed out bones and covered in black and blue spots. In the 1930s a woman named Catherine Wolf Donahue developed a grapefruit sized tumor on her hip, and her jaw began to fall apart. She had worked at a dial painting factory in Ottowa, Illinois.

Eventually, over 14,000 people would die in factories in America every single year. Radium's discoverer Marie Currie herself had destroyed her health and eye-sight from radioactive elements, causing her to die prematurely in a sanatorium. Her co-discoverer husband Pierre died prematurely after slipping and falling under a wagon-wheel which crushed his skull. What an end to that so-called miracle of science.

{Credit goes to Kate Moore's book The Radium Girls, and Georgia Marie's video on it}21,22

And consider that scientists say that pumpkins are botanical berries, and tomatoes are fruits, while nutritionists, cooks, and others in the culinary world consider them both vegetables, since they're not sweet. My point is, though science overall is great; its fantastic; it sometimes substitutes the over-technical and theoretical for the practical. So we must incorporate other disciplines along with science.

TIME

What I will explain is crucial to understanding reality. First, what is time? Some see time as a structure of the universe or physical reality. Others disagree but do see time as a necessary framework of human thought. Yet others see time as just a form of human fantasy. I'll get to the bottom of what time truly is, and why it matters. But first, what time is not: Is time a physical object? The answer is unanimously understood as NO. But can it be legitimately considered part of the physical world outside the realm of molecular matter? For example, light, x-rays, gamma rays, and other forms of electromagnetic radiation. NO, since such phenomena are known to be made of identifiable ethereal particles called photons. And time would be nothing akin to dark matter or energy. But could time be a known principle governing the universe? Well, four fundamental forces describe every interaction in the universe: the strong nuclear force, weak nuclear force, the electromagnetic force, and gravitational force or gravity. This excludes time as a force. In response to the claim that time may be unreal because it is intangible, the existence of dreams was brought up, since they're apparently real yet intangible.

Yet dreams can be shown by tangible brain wave activity; physical reactions that can be scientifically measured. Clocks and watches supposedly show time's existence, by allegedly showing time moving faster at higher elevations, slower at lower altitudes. But an easy explanation is that gravity is greater at lower elevations. Thus gravity simply pushes electronic or mechanical components of clocks or watches at accelerated rates, In fact, everything that exists is known as the same thing wherever in the world it is. Yet when it's said to be 4 pm in Houston, Texas, it's said to be 10 pm in London, England, 6 am in Beijing, China, and 9 am

in Sydney, Australia. They all contradict. Time is not even an instrument, since so-called timepieces: clocks and watches, function as the instruments, which are based on the original instruments: Earth's rotation and revolution, which causes days, nights, and seasons.

Per time travel, it is impossible. Other theories considered impossible were vindicated because nobody could see the future and thus know what would come. But time travel lacks the excuse that it hasn't been discovered yet. Time travelers would have endless chances to appear to us and previous generations. Since they have not, they will not. Then there are time travel paradoxes: logical contradictions associated with the time travel idea. There are two major types: 1) causal loops: a future event caused a past event, which itself caused that future event, in a perpetual loop. 2) grandfather paradoxes: a future event prevents the occurrence of a past event that caused that future event which will prevent said past event. To avoid these impossibilities, some theorize that parallel universes exist in unknown dimensions, which would allow time travel. It's also said that time would be a fourth dimension. But we have ZERO EVIDENCE for any parallel universe or extra dimension beside our three.

Taking stock in something without evidence is insane. Therefore, dismiss the notions of superfluous dimensions and time travel. Even something that only exists to describe the absence of something, such as darkness and doughnut holes, (not the air, etc. in the darkness or holes, just the darkness and holes), and only exists to describe something else, such as light and doughnuts exist, can be travelled across. For example, you can travel from light to darkness to light via tunnels, and move your fingers across a doughnut's absent middle. So since "time" is not even as traversable as nonentities such as darkness and empty space, and fails to meet the other criteria, why persist in believing in it? It's not even a necessary framework of human thought, since thinking in terms of a series of events or chain of causes and effects can be perfectly substituted.

Now for the last criteria of time's supposed existence which I'll explain: Every event or object in every series of such is irretrievably locked in position like train cars either before or after another. There's no time element to reconfigure any of them. And it is inherent to time that each event in a series eventually be described as past, present, and future: all three, which is internally contradictory since each of those three properties contradicts the other two. The claim that there's no contradiction since they are never all three simultaneously would require invoking the passage of time to explain why they're not, which would be circular reasoning. That is, a pragmatic defect in an argument whereby the premise needs as much explanation as the conclusion. In this case a useless time exists because time exists.

You cannot even arrive at tomorrow by waiting on it, not ever, since by the time tomorrow arrives it would be another today. And instead of using the entropy principle: everything eventually moves from order to disorder, to represent the so-called arrow of time, the expression arrow of time should be better served as a simplified explanation of the 2nd Law of Thermodynamics. That's because without entropy or obvious changes in surroundings, you would never be able to tell the difference between one million years BC and AD thirty million. And no laws of physics indicate that the past is any different from the present or potential future. So there'd be no indication that time existed there.

So time is simply a way to measure things. For example, you cannot show me a kilometer. You can point to a stretch of road, but a road it is. You cannot show me a liter. You can point to a bottle of liquid, but a bottle of liquid it is. To be precise, "time" is a formula describing the ratio of one event to another, such as X decays Y amount per Z times that Earth revolves around our Sun. In other words, nothing more than change. So in light of every aforementioned fact which opposes the common narrative, I must conclude that TIME DOES NOT EXIST. That is, in no other sense besides describing change or position of events.

Therefore I coined the word Achronosist. That's because Chronos was the personification of time in Greek mythology (not Cronus the Titan). This Father Time figure was also said to have had a daughter Ananke, goddess of inevitability. From chronos we get our English words chronic, chronicles, chronological, chronology, and others. So to be a chronosist would be a believer in time's existence, while t prefix A would be denial thereof. Hence I'm an Achronosist who promotes Achronosism.

Conclusion to be drawn from time's nonexistence: One implication is that we can never reach or inhabit other planets outside our solar system. That's because that even at the speed of light, we'd have to travel nonstop for decades to reach a sufficient supply of other planets capable of supporting life. And it is universally accepted that nothing can travel faster than light speed. Taking shortcuts through a supposed space-time continuum via theoretical wormholes could never happen, since without time's existence, that whole scenario collapses. Besides the fact that the universe of space is evidently nothingness, instead of unsubstantiated "quantum foam." So we must care for what is likely our only available planet. Another implication is that we can never escape the 2nd Law of Thermodynamics, which law states that everything physical irreversibly deteriorate. Without time's existence this process can never be reversed, while if time existed it potentially could. So we can never escape the eventual death of our planet and physical universe, perhaps millions or billions of years hence.

And we therefore in the meantime cannot use the excuse "Whatever will be will be", and should not say "Whatever is going to happen is going to happen", as if time is like a river pulling things along, to justify inaction. We CANNOT use the excuse "We are living in different times" to justify Modernism. In fact, since time has no substance, this allows a fascinating paradox: We can actually time travel so to speak, actually recreating the past, any period we choose, by simply ceasing or undoing our current faulty actions, and repeating healthy historical actions instead. Modern society can thus make all its present failures vanish. And therefore nobody can know the future. From this we must certainly conclude that all manner of fortune tellers are scammers, and thus avoid them. And by knowing the "future", it would already be decided; free will would not exist. INSTEAD, by exercising free will, we make our own future! It's up to us.